

REMARKS

Claims 1-13 and 15-18 remain in the application. Reconsideration is respectfully requested for claims 1-13 and 15-18 in view of the following remarks.

The previous Final Rejection of claims 1-13 and 15-18 has been withdrawn, and new art is cited in again rejecting the claims.

Claims 1-7, 9, 10, 12, 13, and 15-17 have now been rejected as anticipated by newly cited McKinnon 5,792,055, the Examiner alleging that McKinnon anticipates all claimed features in claims 1-13 and 15-18, although not all claims have been so rejected.

This rejection is respectfully traversed with respect to all claims pending in the application. As defined by claim 1, for example, the claimed probe for detecting magnetic resonance signals comprises first and second electrodes with distal ends being spaced apart and disconnected with the electrodes functional with the conducting medium as a coil for detecting signals.

McKinnon states in his Summary of Invention that his open wire length antenna is not a coil configuration. More specifically, McKinnon states that as used in the application, the open wire length includes an open-ended or un-delimited piece of wire.(Col. 4, lines 58-59). While McKinnon states that the open length antenna piece of wire may be made of a coaxial cable, he notes that the coaxial configuration is not compulsory and the open wire length antenna can be a naked or insulated wire and the outer conductor and insulator can be outside of the patient. Col. 5, lines 14-25. Alternatively, the piece of wire can be two twisted conducting strands as shown at 18 and 19 in Fig. 4. See col. 5, lines 23-31.

Thus, McKinnon is disclosing a conventional monopole or whip antenna for detecting magnetic resonance signals. The whip antenna does not function as a coil as recited in claim 1, nor does the whip antenna comprise first and second electrodes positionable in proximity to a region of interest and functioning as a coil for detecting signals. The whip antenna does not comprise needles as recited in claim 12, have rings around the circumference as recited in claims 7 and 10, extend from and retractable within a catheter as recited in claims 8 and 11.

Accordingly, it is respectfully submitted that the claimed probe is neither shown nor suggested from the monopole guidewire antenna of McKinnon.

Claims 7, 10, 12, 15, and 17 have been rejected under 35 U.S.C. 103(a) as being unpatentable over McKinnon and further in view of Glowinski et al, previously cited in finally rejecting the claims. The Examiner refers to Glowinski et al as showing an alternative coil design.

This rejection is respectfully traversed for the reasons given above with respect to the rejection of claim 1 as anticipated by McKinnon. Further, as noted in responding to the earlier rejection of the claims on Glowinski et al, Glowinski et al do not disclose a signal detector, but rather a coil for generating a magnetic field. McKinnon has no need for a magnetic field coil as disclosed by Glowinski et al, but assuming arguendo that Glowinski were combined with McKinnon, the claimed probe would not result since neither Glowinski nor McKinnon disclose or suggest the use of two electrodes functioning as a coil for detecting magnetic resonance signals, as claimed.

Claims 8, 11, and 18 have been rejected under 25 U.S.C. 103(a) as being unpatentable over Glowinski et al as applied to claim 1, and further in view of Nowinski et al, previously cited. However, the Examiner refers to McKinnon in his remarks and alleges the retractable electrodes of Nowinski et al could be combined with McKinnon, even though the Nowinski et al electrodes are for use with surgical instruments and not for an MR system, as noted by the Examiner.

This rejection is respectfully traversed for the reasons given above for the patentability of the claims over McKinnon. Further, the Nowinski et al electrodes are not taught or suggested for use in MR signal detection applications. It is not seen how the monopole antenna of McKinnon could be reconstructed in view of the teachings of Nowinski et al to suggest applicants' claimed probe.

Since claims 1-13 and 15-18 are patentable under 35 U.S.C. 102 and 103 over McKinnon, since claims 1-7, 9, 10, 12, 13, and 15-17 are patentable under 35 U.S.C. 103 over McKinnon taken with Glowinski et al, and since claims 8, 11, and 18 are patentable under 35 U.S.C. 103 over McKinnon, Glowinski et al and Nowinski et al, singly or combined, all as set forth above, it is requested that claims 1-13 and 15-18 be allowed and the case advanced to issue.

Should the Examiner have any question or comment regarding this response, a telephone call to the undersigned attorney is requested.

Respectfully submitted,
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